



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,312	04/19/2000	Andrea Basso	IDS #1999-0097	4129

7590 12/23/2003

Mr S. H. Dworetsky  
AT&T Corp  
PO Box 4110  
Middletown, NJ 07748

EXAMINER

SHANG, ANNAN Q

ART UNIT PAPER NUMBER

2614

DATE MAILED: 12/23/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/552,312

Applicant(s)

BASSO ET AL.

Examiner

Annan Q Shang

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, is rejected under 35 U.S.C. 102(b) as being anticipated by **Corey et al (5,703,655)**

As to claim 1, note the **Corey et al** reference figures 1 and 2, disclose system and method for indexing and retrieving portions of video programming data contained in a video/audio storage area of stored video programs which includes broadcast television and further disclose a method comprising steps of: the claimed "indexing a media collection..." is met by Control Module (CM) 60 (figs. 1, 2, col. 3, lines 37-51 and col. 4, lines 17-44), note that CM 60 controls the receiver-tuner 24 by supplying it with control signals and also compression/decompression module 36 to create various index records based on the content of the video/audio data "the media collection" and store in video/audio storage device 40, the video retrieval system 20, the claimed "searching the indexed library to identify a set of candidate program segments based on a search criteria..." is met by User Input Device (UID) 76 (col. 4, line 39-col. 5, line 4), note that UID 76 allows the user to search the storage devices 40 and 72, "indexed library," to

identify one or more desired video segments, "set of candidate program segments," "based on the search criteria" (col. 5, lines 31-40), note that closed caption text, which is a video/audio content, is used as search criteria; and Television Monitor 84, is use for browsing the set of program segments to select a segment for viewing, note that the system allows capturing of desire video programs (figs. 6, 12A, col. 5, lines 5-57 and col. 6, line 51-col. 7, line 40).

3. Claims 8-13, are rejected under 35 U.S.C. 102(b) as being anticipated by **Fasciano (6,336,093)**.

As to claim 8, note the **Fasciano** reference figures 6 and 7, discloses apparatus and method using speech recognition and scripts to capture author and playback synchronized audio and video and further discloses method of indexing media for browsing, comprising the following: the claimed indexing a media collection according to detection of speaker voice characteristics" is met by Speech Recognition Module (SRM) 70 (fig. 7, col. 6, line 63-col. 7, line 17 and lines 40-53), note that SRM 70 detects sound patterns of speech, example each Journalist, Editor, etc., (col. 7, lines 41-47) within a received video, capturing and indexing the video or news information "media" according to the voice of the Journalist or Editor "speaker;" the claimed "receiving a search query from a user to locate a media segment from the indexed media collection" is met by the Graphical User Interface (GUI) 40 (fig. 1 and col. 3, lines 11-44), note the User Input 44 is used to select video segments and sound pattern are use in performing a search within SRM 70, where the user is presented with a portion of the indexed video

collection according to the search query (fig. 6, col. 4, lines 7-16, col. 5, line 47-col. 6, line 15 and line 54-63).

As to claim 9, Fasciano further disclose indexing a video collection according to visual information (col. 6, lines 8-15 and lines 54-63).

As to claim 10-13, Fasciano further discloses identifying speaker speech segments (col. 7, lines 40-54) note that the sound patterns of each Journalist or Editor is selected to identify a speaker speech segments, and the identify speaker segments is used to extract video segments and summaries of the video segments of an individual (figs. 4-6 and col. 6, lines 21+), note further the User GUI presents the extracted summaries in response the user search query.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 and 6, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Corey et al (5,703,655)** as applied to claim 1 above, in view of **Fasciano (6,336,093)**.

As to claim 2, **Corey** further teaches extracting from the media collection for each segment of candidate image segments one of closed captioning data as a searchable text data (col. 5, lines 31-57), comparing closed captioning text "the search criteria" to the searchable text data in the storage device 40 and 72 (col. 7, lines 30-57).

Corey fails to explicitly teach extracting speech recognition data when closed captioning data is unavailable.

However, **Fasciano** teaches using speech recognition and scripts to capture author and playback synchronized audio and video where in the absence of closed captioning data, where a speech pattern is used as searchable data to retrieve video (figs. 6, 7 and col. 6, line 54-col. 7, line 15 and line 16+).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fasciano into the system of Corey to provide speech recognition system to extract patterns of speeches, capture related video, store and playback as desire.

As to claims 3 and 4, Corey fails to explicitly teach browseable image for each segment of the candidate program segments which includes keywords identified in the searable text data for display in the browseable image and selecting a display segment from the set of candidate program segments and displaying the associated browseable image with associated keywords.

However, Fasciano teaches providing browseable image for each segment of the candidate program segments (figs. 4-6, and col. 6, lines 15+) which includes keywords (keywords 100) identified in the searable text data for display in the browseable image and selecting a display segment from the set of candidate program segments and displaying the associated browseable image with associated keywords (col. 6, line 54-col. 7, line 15)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Fasciano into the system of Corey to provide a visual presentation to the user of a search result and its associated keywords, to permit the user to view or browse through and select images as desired.

Claim 6 is met as previously discussed with respect to claim 3

6. Claim 5 and 7, is rejected under 35 U.S.C. 103(a) as being unpatentable over **Corey et al (5,703,655)** in view of **Fasciano (6,336,093)** as applied to claims 3 and 6 above, and further in view of **Hoffert et al (5,983,176)**.

As **Corey** as modified by **Fasciano** fail to explicitly teach searchable text data associated with the selected display segment includes a first word having low information content and second word having high information content and forming browseable image includes selecting the second word as keyword and rejecting the first word as a keyword.

However, note **Hoffert et al** reference disclose evaluation of media content in a media files, searches for the files in the database and displays the search results based on the content of the media files where high level content attributes are used for short video sequences to enhanced searching (col. 21, lines 10-28, col. 24, lines 15-35 and Appendix A), note that text and closed captioning data is also used as searchable text.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Hoffert into the system of Corey as modified by Fasciano to use high content level data to perform a search to reduce error in a search result.

As to claim 7, **Corey** as modified by **Fasciano**, teach Journalist or Editor "anchor-person," but fail to explicitly teach an anchor-person associated with the selected video and where the anchor-person with low information content and field shot image of an event of high information content and forming a browseable image by selecting the field shot image as key image and rejecting the image of the anchor-person as key image.

However, note **Hoffert et al** reference disclose evaluation of media content in a media files, searches for the files in the database and displays the search results based on the content of the media files where high level content attributes are more meaning used for short video sequences to enhanced searching (col. 21, lines 10-28, col. 24, lines 15-35 and Appendix A), note that text and closed captioning data is also used as searchable text.

Therefore it would have be obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Hoffert into the system of Corey as modified by Fasciano to discard Editor with low information content and used high content information content to perform a search to reduce error in a search result.

7. Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fasciano (6,336,093)** as applied to claim 8 above, and view of **Halverson (6,523,061)**.

As to claims 14, Fasciano fails to explicitly teach a search query from a user further comprising a natural language query.

However, Halverson teaches system and method for agent-based navigation in a speech-based data navigation system where, when a spoken request is received from a



user, it is interpreted and the resulting interpretation is used automatically construct an operational query (figs. 1, 2, 4 and col. col. 7, line 64-col. 8, line 25).

Therefore it would have be obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Halverson into the system of Fasciano in order to an apparatus to interpreted natural language and use the interpretation to perform queries to achieve reduction in speech recognition error in grammars.

As to claims 15 and 16, Halverson further discloses contextual information from a previous interaction with the natural language and return an answer in an HTML format (fig. 4, col. 10, lines 6-19).

As to claim 17, Halverson further discloses where the natural language search query from a user, comprises generating a semantic description of the natural language query in terms of keyword/value pairs (fig. 3 and col. 11, lines 35-col. 12, lines 11).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection. With respect to claim 1, Applicant argues that Corey teaches video indexing based on closed captioning text and not video content. Examiner disagrees since media content, can be broadly interpreted as closed captioning text. Furthermore, the claim does not require the use of some other form of content for video indexing and further Applicant, admits in claim 2 of using closed captioning text to extract media information. For the above reasons, the rejection of claim 1 is maintained. This Office Action is Non-Final.

**Conclusion**

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McGee et al (6,496,228) disclose significant scene detection and frame filtering for a visual indexing system using dynamic thresholds.

Altunbasak et al (6,389,168) disclose object-based parsing and indexing of compressed video streams.

Dimitrova et al (6,185,363) disclose visual indexing system.

Yeo et al (5,821,945) disclose method and apparatus for video browsing based on content and structure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q Shang** whose telephone number is **703-305-2156**. The examiner can normally be reached on **700am-500pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W Miller** can be reached on **703-305-4795**. The fax phone number for the organization where this application or proceeding is assigned is **703-746-5991**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Customer Service** whose telephone number is **703-306-0377**.



**Annan Q. Shang**



**JOHN MILLER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**